

REMARKS

Claims 14-28, 31, 32, 35, 36, 39, 40, 41, 42, 44, 45, 46 and 49 are pending in the application. Claim 47 has been cancelled. Favorable reconsideration of the application is requested.

Withdrawal of the rejection of claims 14-27 and 40 under 35 U.S.C. § 103 as being unpatentable over DES (Data Encryption Standard), National Bureau of Standards (U.S.) in view of Matsui (New Block Encryption Algorithm MISTY) is requested. Claim 14 has been amended to emphasize the fact that the present invention provides for a first non-linear transformation part and a second non-linear transformation part. In accordance with the present invention, all of the split bit strings are subjected to non-linear transformation by the first non-linear transformation part and the second non-linear transformation part. The second non-linear transformation part subjects each of the outputs of the first non-linear transformation part to a non-linear transformation. By adding the additional second non-linear transformation part to the first non-linear transformation part, the degree of robustness is achieved similar to that of MISTY.

The MISTY reference fails to disclose subjecting all of the split bit strings to the first and second non-linear transformations. As set forth in the enclosed amendments to claim 14, each plurality of bit strings are transformed by the first non-linear transformation part, as well as transformed by the second non-linear transformation part.

The primary reference DES is acknowledged in the Office Action not to disclose the second non-linear transformation part of the rejected claims. The combination of the MISTY reference, with the DES reference, will not therefore yield or suggest the required first non-linear transformation and second non-linear transformation for transforming each of the bit strings which are applied to the cryptographic device. Accordingly, favorable reconsideration is believed to be in order.

Withdrawal of the rejection of claims 28, 29, 30, 32, 33, 34, 36, 37, 38,42, 43k, 44, 46, 47 and 48 under 35 U.S.C. § 103(a) as being unpatentable over DES and Matsui as applied to claim 14 and further in view of Kwan (The Design of the ICE: Encryption Algorithm) is requested.

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Each of the foregoing claims are dependent on claim 14, and carry all the limitations thereto. Accordingly, each of the claims would be allowable since claim 14 is considered to be allowable.

In view of the foregoing favorable reconsideration is requested.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 22-0185, under Order No. 20162-00540-US from which the undersigned is authorized to draw.

Dated: 12/27/04

Respectfully submitted,

George R. Pettit, Reg. No. 27,369

CONNOLLY BOVE LODGE & HUTZ LLP

1990 M Street, N.W., Suite 800 Washington, DC 20036-3425

(202) 331-7111

(202) 293-6229 (Fax)

Attorney for Applicant